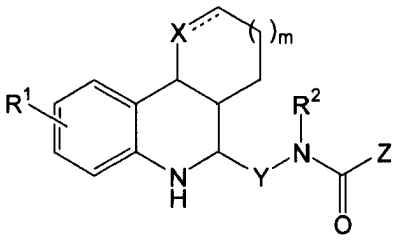
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A tetrahydroquinoline derivative represented by the following formula (I) or pharmacologically acceptable salts thereof:



(I)

wherein R^1 represents a nitro group or a cyano group;

X represents CH or O, provided that when X is CH, the dashed line represents a double bond;

m represents 0 or 1;

Y represents an alkylene group having 1 - 5 carbon atoms which may be substituted by a substituent selected from the group consisting of an alkyl group having 1 - 5 carbon atoms and a cycloalkyl group having 3 - 7 carbon atoms;

R^2 represents a hydrogen atom, an alkyl group having 1 - 5 carbon atoms, a cycloalkyl group having 3 - 7 carbon atoms or an aralkyl group having 7 - 9 carbon atoms;

Z represents -B-O-Q

[wherein B represents an alkylene group having 1 - 5 carbon atoms which may be substituted by a substituent selected from the group consisting of an alkyl group having 1 - 5

carbon atoms and a cycloalkyl group having 3 - 7 carbon atoms; Q is a hydrogen atom, an alkyl group having 1 - 5 carbon atoms or a cycloalkyl group having 3 - 7 carbon atoms which may be substituted by a substituent selected from the group consisting of a halogen atom, a hydroxyl group, a cyano group and an alkoxy group having 1 – 5 carbon atoms, or an aryl group, a heteroaryl group or an aralkyl group having 7 - 9 carbon atoms which may have a substituent R^3,

R^3 represents an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a halogen atom, an aryl group, a heteroaryl group, a nitro group, a cyano group, -A-R4 {wherein A represents -CO-, -CO_2-, -COS-, -$CONR^5$-, -O-, -OCO-, -OSO_2-, -S-, SCO-, -SO-, -SO_2-, -NR^5-, -NR^5CO-, -NR^5SO_2-, -NR^5CONH-, NR^5CSNH- or –NR^5COO- (wherein R^5 represents a hydrogen atom, an alkyl group having 1 - 5 carbon atoms, a cycloalkyl group having 3 - 7 carbon atoms or an aralkyl group having 7 - 9 carbon atoms),

R^4 is a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a cycloalkyl group having 3 - 7 carbon atoms, a halogen atom, or an aryl group or a heteroaryl group which may be substituted by R^6 (wherein R^6 represents an alkyl group having 1 - 5 carbon atoms, an alkoxy group having 1 - 5 carbon atoms or a halogen atom), provided that when A is NR^5- or -$CONR^5$-, R^4 and R^5 may, together with the nitrogen atom to which they are bonded, form pyrrolidine or piperidine)}, or -A'-$(CH_2)_n$-$R^{4'}$ {wherein A' represents a single bond, -CO-, -CO_2-, -COS-, -$CONR^{5'}$-, -O-, -OCO-, -OSO_2-, -S-, SCO-, -SO-, -SO_2-, -$NR^{5'}$-, -$NR^{5'}CO$-, -$NR^{5'}SO_2$-, -$NR^{5'}CONH$-, $NR^{5'}CSNH$- or –$NR^{5'}COO$- (wherein $R^{5'}$ represents a hydrogen atom, an alkyl group having 1 - 5 carbon atoms, a cycloalkyl group having 3 - 7 carbon atoms or an aralkyl group having 7 - 9 carbon atoms), n represents an integer of 1 or 2, $R^{4'}$ represents a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a cycloalkyl group having 3 - 7 carbon atoms, a halogen atom, a

hydroxyl group, a cyano group, an alkoxy group having 1 - 5 carbon atoms, an alkylacyloxy group having 2 - 5 carbon atoms, an alkoxycarbonyl group having 2 - 5 carbon atoms, an aryl group or a heteroaryl group which may be substituted by $R^{6'}$ (wherein $R^{6'}$ represents an alkyl group having 1 - 5 carbon atoms, an alkoxy group having 1 - 5 carbon atoms or a halogen atom), or $-NR^{7'}R^{8'}$ (wherein $R^{7'}$ and $R^{8'}$ each independently have the same meaning as the aforementioned $R^{5'}$, provided that $R^{7'}$ and $R^{8'}$ may, together with the nitrogen atom to which they are bonded, form pyrrolidine or piperidine), provided that when A' is $-NR^{5'}-$ or $-CONR^{5'}-$, $R^{4'}$ and $R^{5'}$ may, together with the $-N-(CH_2)_n-$ to which they are bonded, form pyrrolidine or piperidine}], or alternatively Z represents $-(CH_2)_r-W$

[wherein r represents an integer of 0 - 2, W represents

a phenyl group having substituent R^9 at p-position, a naphthyl group which may have substituent R^{10} or a heteroaryl group which may be substituted by 1 - 3 independent R^{11}'s (wherein R^9, R^{10} and R^{11} independently have the same meaning as the aforementioned R^3)].

2. (withdrawn): The tetrahydroquinoline derivative according to claim 1, where Y is $-CH(CH_3)-CH_2-$ or $-C(CH_3)_2-CH_2-$, X is CH, m is 0, R^2 is a hydrogen atom and Z is $-CH_2-O-Q$ (wherein Q represents an alkyl group having 1 - 5 carbon atoms) or pharmacologically acceptable salts thereof.

3. (original): The tetrahydroquinoline derivative according to claim 1, where Y is $-CH(CH_3)-CH_2-$ or $-C(CH_3)_2-CH_2-$, m is 0, R^2 is a hydrogen atom and Z is -W [wherein W is a heteroaryl group which may be substituted by 1 - 3 independent R^{11}'s or a phenyl group having substituent R^9 at p-position {wherein R^{11} and R^9 independently represent a halogen atom, an

alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a nitro group, a cyano group, -A-R^4 (wherein A is -CO-, -CO_2-, -O-, -NHCO- or -NHCONH-, and R^4 is a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom) or -A'-(CH_2)n-$R^{4'}$ (wherein A' is -CO-, -CO_2-, -O-, -NHCO- or -NHCONH-, $R^{4'}$ is a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a hydroxyl group, a halogen atom or an alkoxy group having 1 - 5 carbon atoms, and n is an integer of 1 or 2)}] or pharmacologically acceptable salts thereof.

4. (original): The tetrahydroquinoline derivative according to claim 3, where Z is a phenyl group having substituent R^9 at p-position or a heteroaryl group having substituent R^{11} {wherein R^9 and R^{11} independently represent a halogen atom, -O-R^4 or -NHCO-R^4 (wherein R^4 represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom)} or pharmacologically acceptable salts thereof.

5. (original): The tetrahydroquinoline derivative according to claim 3, where Z is a phenyl group having substituent R^9 at p-position or a heteroaryl group having substituent R^{11} {wherein R^9 and R^{11} represent -NHCO-R^4 (wherein R^4 represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom)} or pharmacologically acceptable salts thereof.

6. (currently amended): ~~A pharmaceutical comprising the~~ The tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 ~~as an active ingredient~~and a pharmaceutically acceptable carrier or excipient.

alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a nitro group, a cyano group, -A-R^4 (wherein A is -CO-, -CO_2-, -O-, -NHCO- or -NHCONH-, and R^4 is a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom) or -A'-(CH_2)n-$R^{4'}$ (wherein A' is -CO-, -CO_2-, -O-, -NHCO- or -NHCONH-, $R^{4'}$ is a hydrogen atom, an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom, a hydroxyl group, a halogen atom or an alkoxy group having 1 - 5 carbon atoms, and n is an integer of 1 or 2)}] or pharmacologically acceptable salts thereof.

4. (original): The tetrahydroquinoline derivative according to claim 3, where Z is a phenyl group having substituent R^9 at p-position or a heteroaryl group having substituent R^{11} {wherein R^9 and R^{11} independently represent a halogen atom, -O-R^4 or -NHCO-R^4 (wherein R^4 represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom)} or pharmacologically acceptable salts thereof.

5. (original): The tetrahydroquinoline derivative according to claim 3, where Z is a phenyl group having substituent R^9 at p-position or a heteroaryl group having substituent R^{11} {wherein R^9 and R^{11} represent -NHCO-R^4 (wherein R^4 represents a hydrogen atom or an alkyl group having 1 - 5 carbon atoms which may be substituted by a fluorine atom)} or pharmacologically acceptable salts thereof.

6. (currently amended): ~~A pharmaceutical comprising the~~ The tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 ~~as an active ingredient~~and a pharmaceutically acceptable carrier or excipient.

7. - 10. (canceled).

11. (currently amended): A method of ~~preventing or~~ treating muscle wasting ~~disease~~ or osteoporosis, which comprises administering to a mammal in need of such ~~prevention or~~ treatment, the tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 in an amount effective to ~~prevent or~~ treat said ~~those~~ diseases.

12. (currently amended): A method of ~~preventing or~~ treating ~~a disease selected from the group consisting of~~ male hypogonadism, ~~male sexual dysfunction, abnormal sex differentiation, male delayed puberty, cancer in female genital organ, breast cancer, mastopathy, endometriosis and female sexual dysfunction~~, which comprises administering to a mammal in need of such ~~prevention or~~ treatment, the tetrahydroquinoline derivative or pharmacologically acceptable salts thereof according to any one of claims 1 and 3 to 5 in an amount effective to ~~prevent or~~ treat said ~~those~~ diseases.

13. (canceled):